Oral Health

For more information about CDC's oral health program,
visit http://www.cdc.gov/OralHealth/index.htm

New Hampshire

Building Infrastructure to Expand Oral Disease Prevention Services

Public Health Problem

In the early 1990s, New Hampshire did not have an oral health program within the state health agency. Without a state dental director, the state lacked oral health leadership and had one of the lowest fluoridation rates in the nation. In 1996, just 24% of people with access to public water systems in New Hampshire received fluoridated water; the *Healthy People 2010* objective is 75%. Not only did the state lack the capacity to plan, implement, and evaluate oral disease prevention programs, but also it had little capacity for gathering or analyzing surveillance information on the oral health status of its adults and children.

Evidence That Prevention Works

According to *The Guide to Community Preventive Services*, tooth decay typically decreased by 30% to 50% in communities that instituted water fluoridation. Since the 1960s, the prevalence and severity of dental decay (cavities) declined dramatically among U.S. children and adults as a result of fluoride use. Despite these gains, dental decay remains a significant problem for many children, especially poor children and those of some racial and ethnic groups.

Program Example

In 1997, CDC began helping New Hampshire develop oral health-related interventions, particularly community water fluoridation in collaboration with the Health Resources and Services Administration (HRSA). With modest federal funding, the state hired a part-time program coordinator for oral health, and CDC provided technical assistance in developing strategies to promote community water fluoridation. In 1999, voters in Manchester, the state's largest city, approved a water fluoridation initiative. CDC engineers worked with state water department staff to design a fluoridation system, which was implemented in 2000. Approximately 43% of the New Hampshire population on public water systems now receives fluoridated water. In 2000, a CDC epidemiologist was assigned to New Hampshire and 25% of his time was devoted to oral health. In addition, a state-supported full-time dental director was hired in 2001 to provide leadership for the state's oral health program. New Hampshire also used the Association of State and Territorial Dental Directors (ASTDD) Basic Screening Survey to complete the first statewide assessment of the oral health of schoolchildren in 2001.

Implications

With capable staff dedicated to working on oral health issues, it is possible to obtain basic information on oral health status quickly and inexpensively and to use this information for planning and evaluating state oral health programs.

Contact Information

New Hampshire Department of Health and Human Services • Office of Community and Public Health
6 Hazen Drive • Concord, New Hampshire 03301
Phone: (603) 271-5857 • Web site: http://www.dhhs.state.nh.us/

Nevada

Preventing Tooth Decay Through a Water Fluoridation Program

Public Health Problem

Dental decay (cavities) has declined dramatically in the U.S. population because of preventive strategies such as community water fluoridation, the use of fluoride toothpastes and mouthrinses, and the application of dental sealants, plastic coatings placed in the pits and grooves of molar teeth to prevent cavities. Despite these gains, dental decay remains a significant problem for all age groups, particularly for poor people and those of some racial and ethnic groups. In 1992, only 2% of Nevada's population on public water supplies received fluoridated water.

Evidence That Prevention Works

Water fluoridation, increasing the level of natural fluoride in drinking water to a level effective in preventing tooth decay, has been shown to prevent tooth decay in adults and children. In 2001, two major reports reaffirmed the effectiveness of water fluoridation. In one, a work group of fluoride experts convened by CDC concluded that scientific evidence supported the effectiveness of water fluoridation and recommended that it be continued and extended to additional communities. In the other, the U.S. Task Force for Community Preventive Services came to a similar conclusion and also issued a strong recommendation for water fluoridation.

Program Example

Nevada has made significant progress in implementing water fluoridation. With grant assistance from CDC to purchase some of the needed equipment, Clark County, which includes Las Vegas and Henderson and has a population of about one million people, began water fluoridation in 2000. This measure increased the fluoridation coverage in Nevada from about 28,000 to approximately one million residents, or two-thirds of the population on public water. Nevada is also strengthening its capacity to monitor oral diseases, extend water fluoridation, and provide school-based dental sealants through a CDC cooperative agreement.

Implications

Water fluoridation, the most cost-effective way to use fluoride to protect populations from dental decay, reaches 65.8% of the U.S. population on community water supplies, or about 162 million Americans. In 2000, about 100 million people in the United States were not receiving optimally fluoridated water. The average annual cost of water fluoridation ranges from $0.50 per person in communities with populations of 20,000 or more, to $3.17 in communities of less than 5,000 residents. This program demonstrates the importance of increasing access to fluoridated water as an effective means of decreasing tooth decay and its related pain and suffering, costs for treatment, and lost school and work days.

Contact Information

Nevada State Health Division
505 E. King Street, Room 200 • Carson City, Nevada 89701
Phone: (775) 684-4285 • Web site: http://health2k.state.nv.us/

Rhode Island

Building Critical Infrastructure to Provide Standardized Oral Health Screening

Public Health Problem

In 1998, Rhode Island did not have an oral health program within the state health department. Without a state dental director or program, Rhode Island had limited capacity to plan, implement, and evaluate oral disease prevention programs for at-risk children or gather surveillance information. In 1996, only 28% of children under age 14 years in Rhode Island's Medicaid program had received dental sealants, plastic coatings placed in the pits and grooves of molar teeth to prevent cavities; 35% of children screened in 1998 in 10 Providence inner-city elementary schools had unmet oral health needs.

Evidence That Prevention Works

The number of teeth with dental decay has declined dramatically among U.S. school-aged children because of preventive measures such as community water fluoridation and the use of fluoride toothpastes and mouthrinses. Dental sealants complement fluoride use by further reducing dental decay. Despite these gains, dental decay remains a significant problem for many children, especially poor children and those of some racial and ethnic groups.

Program Example

The *Healthy Schools! Healthy Kids! (HS!HK!) Oral Health Initiative* is a statewide effort supported by CDC to improve the oral health of Rhode Island children through school and community partnerships. The program is a collaborative effort by the Rhode Island Department of Education and the Rhode Island Department of Health. Activities have included the formation of the statewide *HS!HK!* Steering Committee, made up of members from more than 30 state, public, and private agencies, foundations, or organizations. Since implementing the cooperative agreement with CDC, the state has hired a dental director, a health promotion specialist, and an oral health program coordinator. The oral health staff, in conjunction with the Rhode Island Department of Education, worked to change state regulations and to implement these changes beginning with the 2000–2001 school year. Schools are now required to provide annual standardized oral health screenings for school-aged children in grades K–5, and once for those in the 7th through 12th grades. Parents of children requiring follow-up treatment are notified and given a referral list of community-based oral health providers. A standardized screening form was designed to collect data on children's oral health in order to define current needs and guide future oral health programs.

Implications

Rhode Island has been successful in expanding and enhancing its state oral health programs because it has in place the three components of oral health infrastructure mentioned in the Association of State and Territorial Dental Directors report, *Building Infrastructure and Capacity in State and Territorial Oral Health Programs*: leadership to address oral health problems, development and promotion of policies for better oral health, and improvement of oral health systems.

Contact Information

Rhode Island Department of Health • Office of Primary Care, Oral Health Program
Three Capital Hill • Providence, Rhode Island 02908
Phone: (401) 222-7620 • Web site: www.health.state.ri.us/disease/primarycare/oralhealth/home.htm

Wisconsin

Implementing a Dental Sealant Program for School-Aged Children

Public Health Problem

The number of teeth with dental decay (cavities) has declined dramatically among U.S. school-aged children because of preventive measures such as community water fluoridation and the use of fluoride toothpastes and mouthrinses. Despite these gains, dental decay remains a significant problem for many children, especially poor children and those of some racial and ethnic groups. In 2001, a statewide survey of third-grade children in Wisconsin indicated that 52% of white children had at least one permanent first molar with a dental sealant; however, only 21% of African American children and only 39% of Asian children had sealants.

Evidence That Prevention Works

Dental sealants, plastic coatings placed in the pits and grooves of molar teeth, have been proven to prevent dental cavities on these chewing surfaces. The U.S. Task Force for Community Preventive Services recently reviewed the scientific evidence of the effectiveness of school-based dental sealant programs. This evidence demonstrated a reduction in cavities of 60%. The Task Force issued a strong recommendation for school-based sealant delivery programs.

Program Example

Healthy Smiles for Wisconsin is a statewide program supported by CDC to improve the oral health of Wisconsin children through school and community partnerships. The program is a collaborative effort led by the Wisconsin Department of Public Instruction and Department of Health and Family Services. The statewide *Healthy Smiles for Wisconsin* coalition also includes more than 25 state, public, and private organizations. The coalition's *Seal a Smile Initiative* (dental sealant program), which began in October 2000, has helped establish 40 new community-based dental sealant programs during the 2000–2001 school year. As of fall 2002, more than 4,900 school-aged children in 40 counties across Wisconsin have received dental sealants through this program. Because the coalition has focused attention on sustainability, the number of school-aged children who receive dental sealants will continue to increase.

Implications

Dental sealants are a cost-effective way to prevent dental cavities in school-aged children. Increasing access to dental sealants among poor children would result in a significant decrease in tooth decay and the subsequent pain, suffering, costs for treatment, and lost school days. This program demonstrates the effectiveness of collaborative efforts to increase access to available health services and to eliminate racial and ethnic disparities among children who have dental sealants.

Contact Information

Wisconsin Department of Health and Family Services • Division of Public Health, Oral Health Program
1 W. Wilson Street • P.O. Box 2659 • Madison, Wisconsin 53701-2659
Phone: (608) 266-5152 • Web site: www.dhfs.state.wi.us/health/Oral_Health/